

Snead State Community College

Workforce Development

Self-Pace Online Training
Students will have six weeks to complete



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Register Here:
www.snead.edu/tbiregistration

\$100.00 per student, per class

Introduction to PLC Programming

This course introduces Allen Bradley ControlLogix Programmable Controllers by describing PLC orientation, operations, and programming languages. It covers basic PLC Programming by describing numbering systems, PLC memory organization, PLC programming software and PLC program analysis. PLC motor control, discrete input and output interfacing, PLC timer and counter instructions are also discussed to give a better application of Programmable Controllers. This course also introduces PLC troubleshooting by discussing levels of PLC troubleshooting, power supply troubleshooting, input troubleshooting and output troubleshooting. Skills also discussed include PLC Systems troubleshooting, event sequencing, application development, program control instructions, and math and data move instructions.

- * Intro to Programmable Controllers
- * Basic PLC Programming
- * PLC Motor Control
- * Discrete I/O Interfacing
- * PLC Timer Instructions
- * PLC Counter Instructions
- * Introduction to PLC Troubleshooting
- * PLC Systems Troubleshooting
- * Event Sequencing
- * Application Development
- * Program Control Instructions
- * Math and Data Move Instructions

Intermediate PLC Programming

This intermediate course covers ControlLogix PLC operation and basic program instructions, PLC project elements, PLC motor control, PLC event sequencing, counter and timer instructions, PLC Ethernet operation, HMI Ethernet operation, and component and system troubleshooting. This course also teaches a wide variety of program commands, ranging from analog input and output, timers and contacts, stepper motor control, and PWM control that will quickly develop relevant and critical skills to be job ready in modern industry environments.

- * Programmable Controller Operation
- * PLC Project Elements
- * Industrial Communications Networks
- * PLC Ethernet Communication
- * Remote I/O
- * Analog Inputs
- * Analog Outputs
- * Variable Output Applications
- * PLC Motion Control
- * PLC Event Sequencing 2
- * Produced/Consumed Data and Messages
- * Introduction to AC Variable Frequency Drives
- * AC Variable Frequency Drives - Speed and Torque Control
- * AC Variable Frequency Drives - Acceleration/Deceleration and Braking
- * HMI Ethernet Operation
- * Basic PanelView Plus Terminal Operation
- * PanelView Plus Application Editing
- * PanelView Plus Application Editing 2
- * Component Troubleshooting
- * System Troubleshooting